

Children share Thanksgiving ideas



As the frost forms on the proverbial pumpkin, children's thoughts invariably begin to turn to the holidays the magic of Halloween, the excitement of the Christmas and Hanukkah seasons, and coming in between, the time of sharing associated with Thanksgiving.

We asked several Carbiders' children at Walnut Hill Elementary School in Harriman to share their Thanksgiving thoughts with our readers. As the following responses indicate, the holiday sometimes means much more than just a two-day vacation from school.

Two kindergarteners at Walnut Hill were uncertain about the meaning of Thanksgiving, but they seem to enjoy it just the same. Misty Delozier, whose father, Gary, works in Y-12's Fabrication Division, said she is thankful for her family and that she really likes turkey. According to Mike Reynolds, son of Gary Reynolds of Security and Plant Protection at ORGDP, "I'm thankful for Halloween and having dinner on Thanksgiving."

Tina Inman, a Walnut Hill first grader and daughter of Tommy Inman of Security, Plant Protection and Utilities at Y-12, was also unsure about why we celebrate Thanksgiving, but she said she is thankful for "getting together and having dinner." A classmate, Dychelle Love, whose mother, Willie Mae, works in Engineering at ORGDP, said she is thankful for "holidays to get out of school, and for my new sister."

Third graders that we talked with had some definite ideas about the history of the holiday. Andrea Goins, daughter of J. D. Goins of ORGDP Maintenance, said quite matter-offactly that Americans celebrate Thanksgiving because "the Pilgrims and Indians made friends." Andrea added that she is thankful for her parents, sisters, brother, house and clothes. "I'm also thankful for getting to come to school. I like it," she said.

Amy Currier, whose father, Teddy, also works in ORGDP's Maintenance Division, said she is thankful

(Please see page 8)



"I'M THANKFUL FOR..." — Dychelle Love (right) ponders the question as classmate Tina Inman looks on.

UNION CARBIDE

Nuclear Division News

Vol. 11/No. 23
November 13, 1980



DIVISION CITED-Tony Dean, right, manager of ORGDP's Maintenance Division, accepts the President's citation to the Nuclear Division for its energy conservation efforts. Dean, who serves as the Nuclear Division's Transportation Conservation Committee chairman, accepts the citation from Los Angeles Mayor Tom Bradley. Bradley, representing President Carter, serves on the National Task Force on Ridesharing.

Carter cites Division for energy efficiency

The Nuclear Division of Union Carbide was among 15 organizations cited recently by President Carter for energy efficiency. Tony Dean, manager of ORGDP's Maintenance Division, accepted the award in ceremonies in Los Angeles. Dean is chairman of the Nuclear Division's Transportation Conservation Committee.

The awards were presented by William J. Beckham Jr., deputy secretary of the U.S. Department of Transportation, and Los Angeles Mayor Tom Bradley, who serves on the President's National Task Force on Ridesharing.

Our citation read: "Union Carbide Corporation, Nuclear Division, which operates four plants for DOE, reduced gasoline consumption by 19 percent in the year ending last March 31. This was achieved by allocating gasoline to various units through the use of coupons, installing shuttle service among three plants in Oak Ridge, Tenn., and using gasohol for fleet vehicles."

The citations were made in recognition of significant efforts on the part of the recipients in promoting carpools, vanpools, driver efficiency training and the use of public transportation. The goal of the government-industry ridesharing program is to save 400,000 gallons of gasoline per day by 1985.

President Carter announced his Energy Efficiency Awards Program on April 29. The program is part of a long-term federal initiative to encourage citizen participation in the national drive toward greater energy efficiency.

The first awards for energy conservation achievements in transportation were presented by the President at a White House ceremony on July 22. At that ceremony, President Carter urged Americans to conserve energy to reduce this country's dependence on oil imports. He said conservation is working because the nation imported 15 percent less oil in the first half of 1980 compared to last year, but "we have still not reached our goals."

Carter added that "millions of our citizens now recognize how vital it is for each one to join in to cut imports" and that the cheapest way to do that is "to reduce our own consumption."

Recent Retirements

(Editor's Note: A host of Nuclear Division employees will be retiring December 31. They will be apportioned out in the next few issues of the News.)



Martin J. Skinner Law Department General Staff 32 years service



Marion D. Story Process Maintenance 31 years service



Obrun J. Potter Dimensional Inspection Chemical Services 11 years service



Eva M. Lowe 34 years service



Willard C. Crawley General Weld Shop 35 years service



Buford E. Reneau Materials Transfer & Packing, Y-12 35 years service



Albert H. Wilson **B-2** Expansion Assembly, Y-12 29 years service



Tennyson I. Sloan **Production Coordination** 44 years service



Emmett J. Walker Dispatching 28 years service



Clyde C. Jones 28 years service



Harry E. Henderson Research Services 34 years service



Hobart L. Golden Stores Department 34 years service



Support, Y-12 26 years service



George A. Burton Jr.
Materials Testing
Support, Y-12

Harry P. Templeton Jr.
Technical Information
Services, Y-12

James E. Lovelace
Beta 2 Assembly
Y-12 34 years service



27 years service



Willie B. Kirk Jr. Maintenance 30 years service



How effective are tests for syphilis?

by T. A. Lincoln, M.D.

QUESTION: I was called after my physical and told that my blood test for syphilis was positive. Then I was given a different test and told that I was OK. I also remember the hassle I had when I was married. My fiance and I decided to marry over the Christmas holidays, but we found that we had to wait a couple of days to get a blood test. My question is: Are these tests reliable? It seems that a great deal of money is wasted on routine testing of people over 45, like me, who have settled down and have families.

ANSWER: Forty-three million blood tests (serologies) for syphilis are performed in the United States each year. Four to five million premarital tests were performed in fortyfour states in 1978. Most states also require a routine serological test for syphilis (STS) for all women who seek prenatal care for pregnancy. Probably less than two percent of the tests are done either because active disease is suspected from the symptoms or as a follow-up on someone already being treated.

Test yield is low

The yield from routine screening tests is low. In 1976, of the 43 million tests performed, only 1,114,481 were positive (2.7 percent), and 84.2

percent of these either represented previously treated syphilis infections or were "administratively disposed." In the latter case, presumably the diagnosis was already known or there was a technical problem in the quality of the test result. In only 176,606 (0.4 percent) of the total tests was a new diagnosis of syphilis made.

In the 4 million premarital tests performed nationally, only 456 cases of infectious syphilis (little more than 0.01 percent) were discovered. If each couple paid \$25 for the test and necessary forms, it would mean that approximately \$100,000 was invested for every infectious case found. In New York City, where syphilis is more common, a 1976 study estimated that each case detected through premarital testing cost approximately \$60,000.

Consequences of not testing

What about the consequences of not testing at all? The acute symptoms of syphilis can easily be ignored, because the primary lesion, the chancre, is not painful and disappears in a few weeks without treatment. After three to six months, evidence of a generalized infection often occurs. Unfortunately, the symptoms are frequently mild, and

the tiredness, sore throat, headache and faint rash may be interpreted as symptoms of a "virus infection." Without treatment, they also disappear gradually.

Symptoms may disappear

A "silent" period of from 2 to 30 years then follows, when no manifestations of the disease, other than a positive blood test, can be found. When the disease finally reappears, it has already caused devastating effects on the brain, spinal cord, heart, large blood vessels, bones, skin and tongue. In the past, many patients spent years in chronic disease hospitals before they eventually died.

Also affects newborn

Congenital syphilis frequently affects children born of syphilitic mothers and can be devastating to the newborn. It is treatable when recognized early, but often it is not discovered until late childhood, when the damage may be perma-

Undiscovered syphilis is clearly a dangerous disease and can be extremely expensive to society. Most states provide free blood testing in state-operated laboratories for physicians and hospitals.

False positives are common

Unfortunately, false positive tests are common. The error rate reported in several studies varied from 3 to 40 percent. These false positives are sometimes an aftermath of a previous bacterial or viral infection. Immunizations or pregnancies may also result in a positive test.

Many autoimmune disorders, such as rheumatoid arthritis and thyroid disease, may cause a chronic false positive and, therefore, may have

more serious implications than any concern about syphilis. Dr. Yehudi Felman of the Bureau of Venereal Disease Control, New York City, says all patients who appear to have a chronic false positive should have a careful diagnostic study. False positive tests may occur during drug addiction or the use of certain drugs for the treatment of high blood pressure. In many cases, the cause is never determined. More specific blood tests are available for use when a screening test is positive.

Concentrate routine testing

To further complicate the picture, some persons with syphilis do notshow positive tests. False negatives may go as high as 20 percent.

The answer may lie in concentrating routine testing in those areas where it is more likely to be positive, including young people (under 40), known homosexuals, those who have a diagnosis of gonorrhea or any other sexually transmitted disease and those who admit promiscuity. Because of the potentially severe consequences, all pregnant women should be tested.

In clinics where routine physical examinations are performed, the interval between tests could be lengthened as the patient gets older.

Completely giving up serological tests is out of the question. The incidence of new cases of diagnosed syphilis rose approximately five percent last year.

Next issue...

The next issue will be dated November 27. The deadline is November 19.

Oak Ridge, Portsmouth landscapes changed by centrifuge facilities

(Editor's note: This is the second of two articles dealing with gas centrifuge development.)

Since 1972, several industrial firms and consortia have participated in a technology transfer program in which centrifuge technology is being shared with private industry. The three major industrial firms that have been active in the program - each of which has invested in commercial centrifuge facilities, conducted centrifuge research and development, and established independent vendor networks for materials and services are Goodyear Aerospace Corporation, Boeing Engineering & Construction and Garrett Corporation. Several firms are also conducting centrifuge-related work under DOE contracts.

Since early in the program, Union Carbide and AiResearch have worked concurrently on competitive centrifuge designs. By 1976, both organizations had developed high-capacity, efficient, reliable machines. A key action early in 1977 was the selection of a single design to be developed further by both organizations for ultimate use in the full-size Gas Centrifuge Enrichment Plant (GCEP) at Portsmouth.

Development facilities

The primary technology development work in today's centrifuge program is carried out by Union Carbide's Nuclear Division, AiResearch and the University of Virginia. In the Nuclear Division this task has been the responsibility of ORGDP's

Separation Systems Division, headed by Ernest C. Evans under the direction of William J. Wilcox Jr., Nuclear Division technical director for production. The Separation Systems Division now has 589 employees and an annual budget of nearly \$60 million.

Several development facilities have been or are being constructed to test and improve centrifuges, their associated equipment, and centrifuge operating procedures. At its Torrance, Calif., location, AiResearch operates machine development, machine manufacturing, and test facilities; the University of Virginia has some development facilities as well. The major facilities operated by the Nuclear Division at ORGDP include:

- The Equipment Test Facility (ETF), completed in late 1971, which was built to provide reliability tests of early-model centrifuges. To date, this facility has accumulated more than 500 machine-years of operating time.
- The Advanced Machine Development Laboratory (AMDL), constructed to develop machines that would minimize the cost of centrifuge enrichment. This facility was used to develop an enrichment plant prototype machine, which was later the basis of the machine selected for the GCEP, and to study advanced

centrifuge isotope separation and balancing technology.

- The Component Preparation Laboratory (CPL), the center of centrifuge manufacturing and assembly. Its original mission was to develop prototype manufacturing processes and to demonstrate that large numbers of centrifuges could be manufactured economically.
- The Component Test Facility (CTF), the first large-scale demonstration of a gas centrifuge cascade for uranium enrichment. Since its startup in 1975, the CTF has demonstrated routine, day-to-day centrifuge plant operation and taught engi-

under construction. This will be the largest of the test facilities, at a total cost of \$60 million. Its primary purpose will be to demonstrate the operation, reliability and performance of the full-scale GCEP cascade and of centrifuges procured from outside vendors. The CPDF will also house other development projects related to the GCEP.

Project Office established

The Gas Centrifuge Enrichment Plant is a multi-billion-dollar project directed by DOE's Oak Ridge Operations. It involves three operating contractors (the Nuclear Division, AiResearch and Goodyear Atomic), twelve architect/engineering firms, a construction management and construction group, and numerous subcontractors and consultants.

To coordinate the efforts of the operating contractors, the Gas Centrifuge Project Office (GCPO) was established in Oak Ridge in 1977. It is

A key action early in 1977 was the selection of a single centrifuge design for ultimate use in the Gas Centrifuge Enrichment Plant at Portsmouth.

neers much about the centrifuge enrichment process.

- The Advanced Equipment Test Facility (AETF), completed in 1978, was built to evaluate the reliability and operability of GCEP prototype centrifuge machines and processes. The facility's cascade is arranged and controlled in the same way as the cascade planned for the GCEP.
- The Centrifuge Plant Demonstration Facility (CPDF), the Division's latest project, which is still

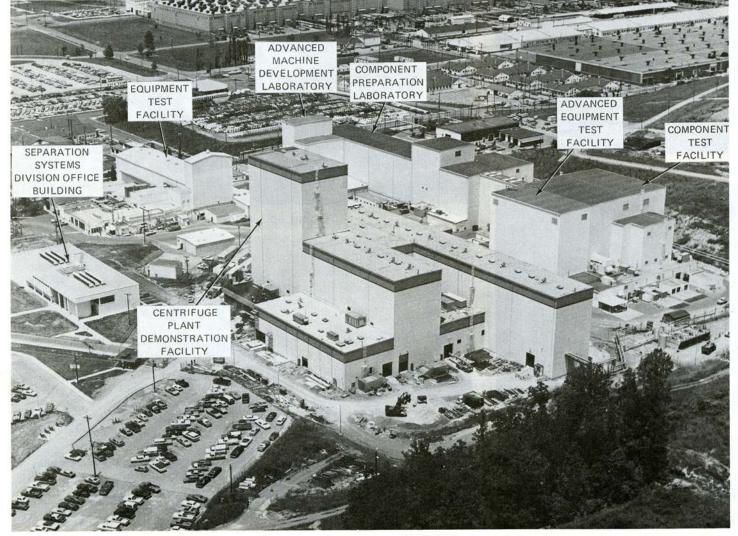
responsible for management and coordination of the GCEP project's many requirements — including such areas as technology and design development, review of the architect/engineering work, reliability assessments, special equipment procurement, assistance in plant checkout and startup, and transfer of government-developed technology to private industry whenever possible.

Under the direction of Project Manager Charles P. Frew, the GCPO consists of two major divisions: Centrifuge Procurement Coordination and the Operating Contractors Project Office (OCPO), which is managed by a representative from each of the three operating contractors.

GCEP: Moving ahead

Work on the GCEP is progressing on schedule. Earthmoving at the Portsmouth site has been nearly completed, the structural steel erection for the first process building is finished and the building's roof decking is being installed. In the Nuclear Division, some 2,000 employees from ORGDP's Separation Systems, Enrichment Technology and Operations Analysis Division, from the Engineering Division, from the Paducah Plant and from supporting groups such as Maintenance, Computer Science and Purchasing — as well as nearly 150 AiResearch and Goodyear Atomic employees — are playing major roles in the project.

When complete, the GCEP will consist of eight process buildings — each 400 feet wide, 700 feet long and nearly 90 feet high — housing thousands of centrifuges. The process buildings will be interconnected by a transfer corridor to a Recycle/Assembly Building in which new



Centrifuge development facilities and office buildings near ORGDP's Portal 3.

(Please turn to page 7)



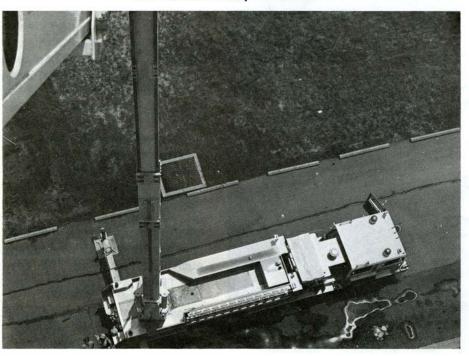




The Firebird and crew at work



The truck is ready for action



"Bird's-eye view" from the lifter

ORGDP's Firebird stars in surprise fire drill

A surprise fire drill at ORNL's Environmental Sciences Laboratory recently gave the building's occupants a chance to test their emergency preparedness and the ORGDP Security and Plant Protection Division an opportunity to demonstrate their newest piece of firefighting equipment, "the Firebird."

Environmental Sciences Division Director Stan Auerbach described the drill as "very successful in checking the efficiency of our emergency squads, building searchers and emergency procedures." It took only 30 seconds to assemble the emergency squads and another three minutes to clear about 100 persons from the building.

In evaluating the drill, Auerbach pointed out the need for wardens to actively move people to designated areas outside the building. "But that's what these drills are for-to train people," he said.

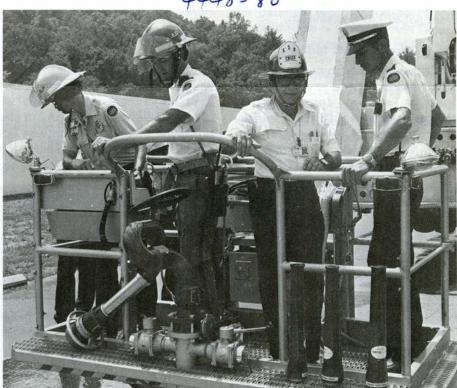
Answering the alarm along with ORNL fire trucks, the chartreuse Firebird stole the show as ORNL Plant Protection personnel were

given, literally, a bird's-eye view of its operation.

ORGDP Fire Chief David A. Coleman explained the value of the Firebird in rescue and firefighting operations: "Its versatility enables us to reach ordinarily hard-to-get-to structures. This makes the Firebird especially valuable for firefighting in buildings that have a broad expanse of roof. It can go as high as 125 feet in the air and can pump more than 1500 gallons of water per minute. The Firebird is also one of the safest apparatuses built for this type of work. It will be used as the second response pumper at ORGDP and in responding to mutual aid requests from Y-12, ORNL and the City of Oak Ridge."

The five-month-old fire truck, which was put into active service last month, has been used in fire drills and in a five-week training program for ORGDP firefighters. The Firebird's most recent debut was in a drill at Jackson Plaza, a 10-floor office complex that is the tallest building in Oak Ridge.

1448-80



"Going up" in the Firebird lifter



After the drill, it's back to the office

Solar tests at ORNL



SOLAR TESTS—This parabolic trough reflector will be used by ORNL researchers to test various types of solar photovoltaic cells for degradation, weathering and other effects. The reflector, which will be located on top of Building 4508, will be mounted on a tracking unit that is able to follow the sun year-round. Made of silvered glass, the reflector's surface is 152 cm wide and has a chord length of 208 cm. It is designed to concentrate 40 times the sun's power on the solar cells which will be attached to its receiving tubes. Jack Heck and Melvin Willey, Engineering, inspect the reflector before it is mounted. Principal investigators for the experiment are Stephen Kaplan, ORNL solar energy coordinator; and Ernie Long, Metals and Ceramics Division.

Question Box

Why conduct exit interviews?

QUESTION: What is the purpose and use of exit interviews by Employee Relations? To whom are the results of these interviews revealed and in what form are they released?

ANSWER: Normally, when an individual is employed, we assume we are gaining a long-term career employee. If the individual terminates, we need to examine the cause to determine if any controllable, unsatisfactory conditions contributed to his/her termination. Specific results of the exit interview are placed in an employee's permanent personnel records folder and are examined by management only on an internal need-to-know basis. Composite statistical results of exit interviews are tabulated and reviewed to determine if a negative trend exists and/or corrective action is needed.

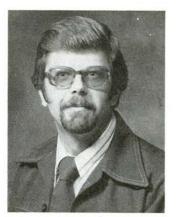
QUESTION: What is the basis of the rule banning the use of radios on the job? In some areas, radio stations are broadcast through speakers to employees. Some employees feel that, where these services are not offered, they should be allowed to bring a small radio for background music to drown out excessive background noise. Can exceptions be made to this rule?

ANSWER: Personal radios have been officially banned from Nuclear Division installations since the earliest days of the Manhattan Project during World War II. The ban originated because classified security matters could be adversely affected; also, variations in personal preferences as to both the volume and type of radio entertainment might prove to be disruptive. These reasons continue to be valid.

The background music furnished in some areas is regulated and controlled and can be discontinued if it proves to be disruptive or counterproductive.

Employees are reminded that employee regulation No. 5 contained in the booklet, You at Union Carbide, states "You are not permitted unauthorized cameras, radios (other than car radios), recorders, or transmitters on Company premises." Regulation No. 6 prohibits employees from bringing personal property into the plant other than that required in the performance of their work.

Employees are again asked not to bring radios to work, and supervisors are reminded of their responsibility to enforce established regulations.



Kibbe



Bohanan

Kibbe, Bohanan named to key LCP positions

The appointments of R. Keith Kibbe and Robert E. Bohanan to key positions in the Large Coil Program (LCP), managed by ORNL's Fusion Energy Division, have been announced by O. B. Morgan, division director.

The Large Coil Program is responsible for the construction and operation of the Large Coil Test Facility (LCTF), to be used beginning in 1981 for testing and demonstrating the large electromagnets crucial to the operation of future fusion reactors, and for procurement of the magnet coils to be tested.

Kibbe has been named assistant manager of the Large Coil Program. He will be responsible for the management of work by General Dynamics Convair Division, General Electric and Westinghouse Electric, LCP subcontractors who are each designing and manufacturing one magnet coil to be tested in the LCTF.

Bohanan has been appointed head of LCTF maintenance planning and control, where his job responsibilities will cover the installation of the test coils and the subsequent maintenance of and modifications to the LCTF during the course of its long-range test program.

Kibbe, who holds a BS degree in mechanical engineering from Montana State University and an MS in mechanical engineering from the University of Southern California, joined Union Carbide in 1977 as project manager for the Office of Waste Isolation. For the past two years he has been manager of ORNL's Light Water Reactor Technology Program.

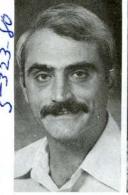
He holds two professional engineering licenses from the state of California and is a member of the American Nuclear Society, the National Society of Professional Engineers, and Pi Tau Sigma national mechanical engineering fraternity. He and his wife, Judy, live at 7565 Glastonbury Road, Knoxville.

Bohanan joined Union Carbide in 1960 and held positions in Y-12's Fabrication Division until 1975, when he joined the ORNL staff. For the past five years he has been involved with operating and maintaining test facilities associated with the Blowdown Heat Transfer Program in ORNL's Engineering Technology Division. He is a native of Knoxville and served four years with the U.S. Navv.

Bohanan holds a BS degree in mechanical engineering from the University of Tennessee. He and his wife, Betty Jo, live on Schaeffer Road in Knox County with their two children.

At ORNL

Devaney, Wilson promoted



Devaney

Wilson

Two promotions have been announced at ORNL. Coolidge D. DeVaney has been named a shift supervisor at the Oak Ridge Research Reactor in the Operations

Division, and Kenny Wilson has been promoted to a process supervisor, pilot plant section, Chemical Technology Division.

DeVaney, a former reactor operator, served six years in the United States Navy before joining Union Carbide in 1977. The Kingston native is married to the former Judith Lynn Farinash. They live at Route 3, Rockwood, and have two children, Jennifer Lynn and Eric Dustin.

Wilson came with Union Carbide in 1974, after working with Burlington Industries in Rockwood. He and his wife, the former Yvonne Denise Blevins, live at Route 2, Secluded Hills Subdivision, Rockwood.

Around the alleys...

Y-12 Classic

The Splinters hang onto a slim lead in the Y-12 Classic Bowling League, as the All Stars and Kingpins move up with wins. Scott Krebs holds the top series, 712, and Ray Smith's 287 is high game in handicap scoring. The Atta-Boys hold a 3209 team score.

ORGDP Women's

The Payoffs hold a good lead in the ORGDP Women's Bowling League as they recently clipped 26 points from the Jay Hawks. Mary Hawkins' single of 202, 241 is season high and Oleta Carden's 519 scratch series is high. The Spotters hold top team scoring with a 2432 handicap series.

Retirees

The UCC Retirees rolled off to a flying start recently with six mixed teams participating (two men/two women). Dan Dehner, Go-Getters, rolled a high handicap game of 241; and J. Akers, Pin Busters, took a 621 handicap series. The retirees roll every Monday at 1 p.m. at Tri-County Lanes.

ORNL C

The Hit Men have a fair lead in the ORNL C Bowling circles, as the Easy Rollers and Engineers nestle into second and third places. Carlos Brooks, Alley Rads, recently posted a 698 handicap series. The Remkeys posted a recent high series of 3066.

K-25 Wednesday

The Operators hold a one-point lead in the K-25 Wednesday Men's Bowling League, out in front of the Amps. Season highs go to the Demons with a 3070 handicap series. Recently Chuck McCluskey rolled a 235 single scratch game . . . a 610 series. Season highs still are held by C. A. Carmichael with a 718 handicap series.

Monday Mixed

First place in the Monday Mixed League belongs to the Four Eagles with the Free Spirit and 3 Tall-1 Short close behind, both tied for second place. Jennie Saffell, an alternate for the Free Spirit team, rolled a 235/570 recently. New handicap standings are as follows: Team series — High Rollers / 2344; team game — Free Spirit / 840; men series and game — Earl Davis / 666, 249; women series — Pat Reece / 620; women game — Evelyn Nelson / 234.

Monday Family Mixed

The Oops team still has the helm of the Monday Family Mixed League, rolling a high series of 2419. Derek Bowman was the big hero recently, scoring a 642 series; as Mary Montford posted a 657. Sewell Brown rolled a 224 scratch game; Montford a 248. Brown recently took the high scratch series of 544; Tillie Plaza won the women's side with a 536.

APPLICATION FOR TICKETS

PADUCAH CARBIDE CHILDREN'S CHRISTMAS PARTY

(For Children Ages 2-9)

SATURDAY, DECEMBER 13, 9 A.M.

(Doors will open at 8:30 a.m.)

ARCADE THEATRE, PADUCAH, KY.

Employee's Name			Badge	No.
Home Address				
	(0) 0 0	Address of BED. City	and To Code	
Number of your child	(Please Print Street ren who will attend the		and Zip Code)	
Number of your child			(GIRLS)	
Number of your child	ren who will attend the		(GIRLS)	_Age
	ren who will attend the (BOYS) Age	party (please list):	(GIRLS)	_Age _Age

Christmas childrens' parties set

Corporation, P.O. Box 1410, Paducah, Ky. 42001. Tickets will be mailed to parents at their home addresses

Children of Union Carbide employees in Oak Ridge and Paducah will be entertained at special parties as per

K-25 Tuesday

The Mishaps still control the K-25 Tuesday Bowling League, ahead of the Valve Shop and the All Stars. W. S. Rule rolled the high series recently, with a 613 scratch, 697 handicap.

tradition in both areas.

The parties in Oak Ridge are set for Saturday, December 20 at 9 and 11 a.m. and 1 and 3 p.m. At Paducah the party will be staged at the Arcade Theater at 9 a.m. Saturday, December 13.

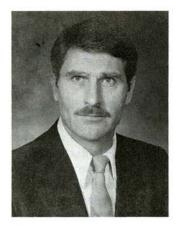
Applications for both areas appear in this issue.



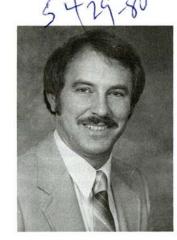
Application for Tickets O



Dog act set for Oak Ridge parties



Dver



Van Hook

Dyer, Van Hook named ESD section chiefs

Melvin I. Dyer and Robert I. Van Hook have been named section chiefs in the Environmental Sciences Division at ORNL, according to an announcement from Stanley I. Auberbach, division director.

Dyer heads the Environmental Resources Section. Van Hook, head of the Terrestial Ecology Section, succeeds W. Frank Harris, who is currently on assignment to the National Science Foundation (NSF).

The Environmental Sciences Division studies the impacts of various energy technologies on the environment.

Dyer is responsible for integrating the Division's terrestial, aquatic and atmospheric research projects, and using information obtained from them to predict environmental effects on a regional basis.

Dyer was born in Havre, Mont. He received a BS degree in zoology from the University of Idaho and an MS and PhD in zoology/ecology from the University of Minnesota.

Prior to joining Union Carbide in September, Dyer was on leave from Colorado State University to the NSF where he served for two years as director of ecosystem studies. At the University, he was a professor in the department of fishery and wildlife biology and scientific director of the Natural Resource Ecology Laboratory.

Dyer and his wife, Barbara, have two children, and live in Oak Ridge at 90 Valley Forge Drive.

Van Hook's section is responsible for research and assessment of the transport, fate and effects of pollutants on terrestial environments. The section also includes programs on energy from biomass, ecosystem analysis and global carbon dioxide cycling and effects.

A native of Florence, S.C., Van Hook attended the University of South Carolina. He received bachelor's and doctorate degrees in entomology from Clemson University, where he was a National Institutes of Health/Environmental Health trainee. He also did graduate research at ORNL under an Atomic Energy Commission/Oak Ridge Associated Universities' predoctoral fellowship.

In 1970, Van Hook joined Environmental Sciences. He served as technical assistant to the associate director for biomedical and environmental sciences from 1976 to 1978, and most recently was manager of the division's ecosystems studies program.

He has chaired several symposia on the transport of environmental pollutants and is currently U. S. representative to the International Energy Agency's biomass working group.

He and his wife, Nancy, live at 102 Meville Lane, Oak Ridge, with their two children.

PATENTS

David N. Braski, ORNL, and J. M. Leitnaker, ORGDP, for "Method for Homogenizing Alloys Susceptible to the Formation of Carbide Stringers and Alloys Prepared Thereby."

Save Energy/Share the Ride

ORGDP

BUS RIDERS from Rockwood, Harriman, Kingston, straight day. R. K. Hull, plant phone 6-0204, home phone Harriman 882-5618.

VAN POOL RIDERS from Farragut, West Knox County, to Portals 5 and 6, straight day. Lee Ford, plant phone 4-9711, home phone Farragut 966-8331.

JOIN CAR or VAN POOL from Oak Ridge to Portal 7, 8-4:30 shift. Faye Buis, plant phone 4-8355, home phone Oak Ridge 483-6593.

CAR POOL MEMBERS from Walker Springs, West Bridge Apartments, to Portal 1 or 2, 7:45-4:15 shift. Steve, plant phone 6-1894, home phone Knoxville 690-1886.

JOIN or FORM CAR POOL from Emory Road, Karns area, to any portal, A Shift. E. W. Pritchard, plant phone 4-9280, home phone Knox-ville 938-3773.

RIDERS from Eatons Cross Road section to Portals 5 and 6, straight day. Paul Rutter, plant phone 4-8297; home phone Lenoir City 986-

ORNL

WILL JOIN CAR POOL from Hidden Hills or Fair Oaks Subdivision, Knoxville, to the East Portal or Melton Valley Area, 8-4:30 shift. Robin Denning, plant phone 4-5851.

WILL JOIN OR FORM CAR POOL from Emory Road/Karns area to any portal. Flexible day shift hours. Jim Barhorst, plant phone 4-5506; home phone 947-9266.

RIDE NEEDED from Viola Road area, Oak Ridge, to West Portal, 4:30 p.m. - 12:30 a.m. shift. Call 4-7783 or 483-8350.

Gas centrifuge facilities

(Continued from page 3)

centrifuges will be repaired or rebuilt. A Feed and Withdrawal Facility will provide for the input of UF $_6$ into the plant and for the extraction of the enriched and depleted gas streams.

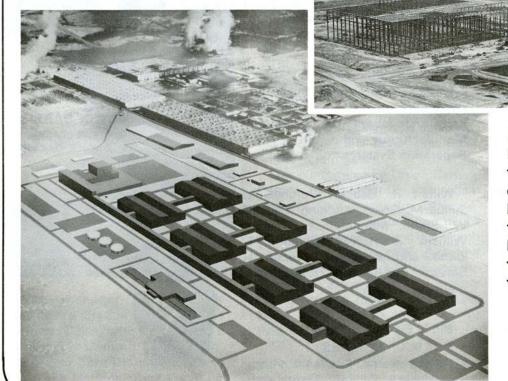
The plant will begin limited operation in 1985. The first process building is expected to be ready for full-capacity operation by June, 1988, and the second by October, 1989. After the first two process buildings have been completed, plans are to add the others as

required by the demand for enrichment services.

Today the United States supplies most of the enriched uranium used in the free world to generate electricity in nuclear power plants. Through the efforts of the Nuclear Division and other government and private research and development organizations, the nation is working continuously to improve existing uranium enrichment plants and to develop new enrichment techniques that can help meet future energy needs at as low an energy cost as possible.



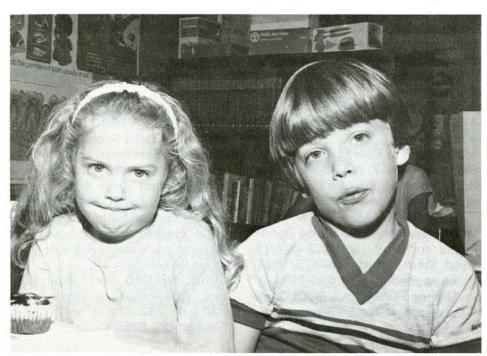
ARTIST'S CONCEPT shows the complete Gas Centrifuge Enrichment Plant facilities superimposed on a photo of the Portsmouth Gaseous Diffusion Plant.



IN A RECENT PHOTO, the structural steel frame of the first GCEP process building can be seen on the construction site. The building should be ready for full-capacity operation in 1988.

Students explain meaning of Thanksgiving

(Continued from Page 1)



Misty and Gary Delozier

Safety Scoreboard

Time worked without a lost-time accident through November 6:

Y-12 Plant 45 Days	1,439,000 Employee-Hours
ORGDP 48 Days	1,464,148 Employee-Hours
ORNL 179 Days	4,273,756 Employee-Hours
Paducah 100 Days	979,000 Employee-Hours

Anniversaries

Y-12 PLANT

35 YEARS

Clarence L. Riggs, Special Services; Stanley H. Cole, Plant Laboratory; Fred B. Guttery, Chemical Services; John F. Bruce, Guard Department; Marcus B. Potter, Chemical Services; Clifford Russell, ORNL Chemical Services; Harry A. Keen, Plant Protection; and John K. Chance Jr., Plant Records.

30 YEARS

Homer C. Day, A Wing, H 2 and F Area; Addie D. Lynch, Production Radiation Testing; John C. Campbell, Mechanical Inspection; Okey H. Dunaway, Dimensional Inspection; Edward T. Creech, Plant Laboratory; Guy L. Seaton Sr., Management Information Systems; Fred G. Childress, Development Division; John E. Williams, Casting Department; Mark R. Braden, Guard Department; and William A. Newman, Process Maintenance.

25 YEARS

Peggy C. Hardin, Pauline L. Pemberton and Bill J. Sutton.

20 YEARS

Clark M. Lay and Timmons Scott.

ORNL

35 YEARS

Charles J. Coley, Analytical Chem-

istry; Sam P. McCroskey, Biology; and Rubin J. Stephens, Employee Relations.

30 YEARS

Harry C. Claiborne, Chemical Technology; Ernest L. Ryan, Metals and Ceramics; and Howard C. Swann, Biology.

25 YEARS

Sammie D. Clinton, Raymond M. Fuller, Charles D. Humphrey, James Oxendine and Billy R. Scarborough.

ORGDP

35 YEARS

Fletcher F. Keylon and Paul D. Harris, Maintenance Division; Bert M. Kelly and John C. Vance, Barrier Manufacturing; and James E. Pope, Separation Systems.

30 YEARS

Wilten R. Osborn, Purchasing; Julius M. Gregg, Auditing; William W. Smith, Maintenance Division; William M. Harvey, Kenneth T. Ziehlke and Joseph Burch, Technical Services; and Robert B. Neal, Enrichment Technology.

25 YEARS

Bill L. Evans.

20 YEARS

Alvin J. Norris, Charles R. Ferguson, Joseph C. Hall, Margaret R. Childs and Willard T. Hubbard.

for the new friends she has made at school, as well as for her family and home. According to Amy, Thanksgiving is celebrated because "the Pilgrims and Indians fought and then stopped. Afterwards, they gave each other food, so we all have dinners on Thanksgiving Day."

Another Walnut Hill third grader, Gary Delozier, who is Misty's brother, thought for a few moments before whispering that he is thankful for God, his family, holidays when he doesn't have to go to school and food.

Tonya Gallaher, whose father, Jackie, works in Maintenance at Y-12, knows that we celebrate the holiday because of "the Pilgrims — and some Indians who were on their side." Tonya said she is thankful this year for turkey and dressing, her grandmother and aunt, her physical education class and her teacher.

Sheila Fitzhugh and her family recently moved to Harriman from Paducah after her father, Carlon,

transferred to Y-12's Fabrication Division. She said that her family always has a big dinner on Thanksgiving and mentioned that she is thankful for her family, home and new friends at school. "The Pilgrims first set foot on the rock, and the Indians helped them," is Sheila's version of the first Thanksgiving.

According to our last student, Antonio Myers, whose mother, Shirley, works in Barrier Manufacturing at ORGDP, the Pilgrims helped the Indians grow corn, so they all had a party with a lot of food. Antonio said he is thankful this year for "Christmas, Halloween, Labor Day, Columbus Day, Thanksgiving, mom, dad and vegetables."

(Editor's note: A special thank you to the following Walnut Hill teachers and staff members for their assistance: Nancy Cheatham, Pat Cofer, Darlene Jenkins, Patti Miller and Betsy Ross Schwepfinger.)



Mike Reynolds



Antonio Myers



Andrea Goins



Sheila Fitzhugh

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